

Chapter 5

Conclusion

This thesis has explored little verbs, which play crucial roles in deriving argument/phrase structure. Little verbs include v^* , v , Cause, and Applicative (Appl). Among the little verbs, Appl heads are focused on, as these are involved in the Possessive Relationship Construction (PRC) and the Give Benefactive/Malefactive construction (GBC).

In previous linguistic research, two facts have made it difficult to detect Appl heads. First, they are not always visible. Second, even if an Appl head has a morpheme, the morpheme is often the same in form as its “lexical” verb counterpart, from which the Appl is “derived.”

Regarding the first fact, we showed in Chapter 2 that through careful scrutiny we can obtain evidence that Appl heads do exist even if they are not visible. The existence of a phonetically null Appl head which introduces Experiencer (Benefactive/Malefactive) was detected in comparison with other non-Agentive constructions such as psychological/sensational predicate constructions, adversity passives, and non-intentional causatives based on Hasegawa’s (2001) observation. The proposed layered little-verb structure, which includes Appl, Cause, and v^*/v , correctly excludes ungrammatical sentences because the phrase structure of the sentences does not match the layered little-verb system and cannot be derived. Further, it is found that Experiencer of the PRC is different from Experiencer of other constructions in semantic and syntactic behaviors. Consequently, it is argued that Possessor is raised to the Appl head, which is responsible for an Experiencer (Benefactive/Malefactive) interpretation.

Secondly, an Appl head sometimes has the same morpheme as the “lexical” verb counterpart, which makes it difficult to distinguish properties of the Appl from those of the “lexical” verb. In Chapter 3, we examined properties of an argument to clarify whether the argument (e.g. a *ni*-phrase) belongs to the verb or is introduced by the Appl. Along this consideration, the GBC, in which the verb *(-te)-age-ru/yar-u* ‘give’ is involved, was investigated. It was discovered that the argument of the GBC does have different properties, which has led to a conclusion that the argument is in fact introduced by the Appl head. Further, it was argued that English DOCs are ambiguous between simple ditransitives and GBCs, which means that an invisible Appl head can be contained in English DOCs to introduce a Benefactive argument.

We also proposed that structures which have traditionally been called embedding are attributable to functions of little verbs (cf. Pytkäinen 2002). In examining the GBC, it was found that the way that an Appl head functions is closely related to the verb-type, for the Appl is not something like an extra predicate, but a head which plays a crucial role in deriving argument structure together with a verb and designates a legitimate derivation.

To reach a deeper understanding of Appl, we attempted to answer a question: what is the difference between “functional” use and “lexical” use of a verb? In other words, why do a “functional” verb and a “lexical” verb sometimes share the same morpheme? We speculated that when a verb or its projection Merges to Appl, it is called “grammaticalization.” If V or VP Merges to phonologically null Appl, this process is what we have called “Appl is realized.” Take the verb *age-ru*, for example. The verb is originally used as a verb of transfer, which denotes change of location, corresponding to the English verb *raise*. It was conjectured that if the verb Merges to Appl, it becomes the ‘give’ verb, which introduces a Benefactive argument. Similar phenomena are often observed in many languages. One familiar example is English *have*, which typically denotes possession, but has come to function as Appl, which introduces Experiencer and Cause, among others (cf. Ritter and Rosen 1993, Washio 1997b, and Hasegawa 2004a; see Section 8.1 in Chapter 2 and Section 5.7 in Chapter 3).

A Benefactive/Malefactive argument is not only introduced by external Merge to Appl, but is also raised to that position by internal Merge. This “Benefactive raising” is verified by syntactic diagnostics such as indeterminate binding, pronoun binding, and scope interpretation. The result strongly suggests that thematic interpretation sticks to a local relationship with a head, which is not the case for agreement of formal features, which can be satisfied by the remote operation “Agree” (Chomsky 2000, 2001). The result is also compatible with the proposal by Hale and Keyser (1993) that thematic interpretation is obtained based on phrase structure configuration, probably at the C-I interface (Chomsky 1995).

Throughout Chapters 2 and 3, it is argued that arguments which are not introduced by a verb (e.g., relational arguments), nor deactivated by valuing structural Case, may move. An implication is that the position where a DP is licensed and introduced into syntactic structure and the position where thematic interpretation is obtained are not necessarily identical (cf. Bošković 1994, Hornstein 1999, and Watanabe 1999).

Further, investigation of Japanese V-V predicates in Chapter 4 has brought about a more general view: irrespective of whether one or more than one verb is involved, two factors are relevant to designate properties of a predicate: properties of functional heads, including T and little verbs, and how they Merge. All other conventional notions and dichotomies such as syntactic/lexical, functional/lexical, Control/Raising, and main verbs/auxiliary verbs are only superficial. Just as syntactic derivation is driven by uninterpretable features to fulfill their values, argument structure continues to be derived until the full-fledged categories for the C-I interface are completed.

With respect to data, we have focused on the “head-head relationship” throughout the thesis to show how the proposed hypothesis works empirically:

(1) The generalized little-verb hypothesis

Properties of little verbs restrict legitimate derivation in a language by interacting with each other, with a lower head V, or with a higher head T.

To observe the head-head relationship, important descriptive data are presented from the Japanese language. Japanese is a head-final language, and the heads are often morphologically marked to show their functions, which makes the interaction between heads easy to observe. We presented data from Japanese and shed new light on them through the hypothesis in (1). The head-head interaction within little verbs is shown in Chapter 2, through non-Agentive construction data including little-verb heads marked with *-sase* (Causative), *-rare* (Passive), and *-e* (Transitive/Applicative). The proposed layered little-verb structure correctly accounted for the (un)grammaticality of the data. On the other hand, the GBC data are presented in Chapter 3 to capture the head-head relationship between a functional head, Appl and a lexical head, V. It was examined how Appl introduces a Benefactive argument and marks it with the Dative *-ni*, and we observed that these θ -role- and Case-assigning functions of Appl are closely related to the verb-type. Although *ni*-marking has been extensively investigated in Japanese linguistics, there have been not many studies which explain data from the perspective of a systematic relationship between properties of V and a higher functional head, Appl. Further, in Chapter 4, we presented data from V-V compounds in Japanese. How one argument structure is generated from more than one lexical verb is of great concern to us. It was observed that possible variations of integrated argument structure depend on the way that lexical verbs are intertwined with functional heads, namely, little verbs and T. It is a surprising result that argument structure is thus dynamically derived from lexical verbs, little verbs, and further, a higher functional head, T. This is a new perspective empirically brought to the study of Japanese in particular.

Assuming that the analyses presented in this paper are on the right track, then the following contributions to the theoretical study of language will be made: First, it has become clear that the location of the interface between lexicon and syntax exists not at a certain level or in a certain component, but in the syntactic derivation itself, namely, in each head-head relationship between V and a little verb. Second, θ -role-assigning heads lead the derivation of phrase structure, and at the same time, restrict the derivation to being legitimate. Theoretically, in the Minimalist

framework, stipulations made in the GB theory have been abandoned. X'-theory, including "artificial" products such as labels and intermediate projections, is also reduced to one simple operation, "Merge" (Chomsky 2006). X'-theory was a theory of legitimate phrase structure in natural language. We consider that our hypothesis in (1) partially replaces the function covered by X'-theory. That is, instead of X'-theory, the head which derives argument structure also derives legitimate phrase structure. Thus, in human language, T constructs phrase structure through agreement of the relevant formal features; C extends phrase structure through illocutionally force encoded in syntax; and little verbs derive phrase structure through forming argument structure as syntactic representation.